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REPLY BRIEF FOR APPELLANTS  
IN RE PHILIP R. THRIFT and CHARLES T. HEMPHILL

U.S. PATENT & TRADEMARK OFFICE

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*United States Court of Appeals  
For the Federal Circuit*

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01-1445

(Serial no. 08/419,229)

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IN RE PHILIP R. THRIFT and CHARLES T. HEMPHILL

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APPEAL FROM A DECISION OF THE BOARD OF PATENT APPEALS  
AND INTERFERENCES DATED FEBRUARY 28, 2001

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## REPLY ARGUMENT

Prior to discussing the misstatements, incomplete statements and misleading statements in Appellee's Brief, it is again noted that a major issue in this appeal is the definition of a "speech user agent" and the functions obtainable by the software involved in the speech user agent (for more details see Section 8 infra) which are not present in Stefanopoulos et al., Schmandt et al. or any reasonable combination of these references, assuming arguendo that the references are combinable (the contrary has been argued and will not be repeated).

A combination of Stefanopoulos with Schmandt, at best, will result in a voice-operated selection of preset locations from which information can be derived. This information must be prerecorded into the system in order to be accessible by the voice operation. Any information not pre-designated in the system of Schmandt et al. is not recoverable. On the other hand, in accordance with the subject invention, the voice message is recognized by the speech user agent and the voice information is converted to code and the meaningful information is transmitted, such as on the Internet, to locate sites on the internet having the coded terminology. For example, if a voice

message says "what is the weather in Chicago", the speech user agent will recognize all of the words, note that "weather" and "Chicago" are important, convert the important words to code and scan the web for sites that contain both "weather" and "Chicago". There is no need to prerecord these terms and pre-associate them with specific web sites in order to be able to subsequently locate a desired site on the web whereas the combination of Stefanopoulos and Schmandt must have a preset location for both of these terms or there is no possibility of recognition initially and therefore no possibility of a hit on the web. It is therefore apparent that, even given the broadest definition of the combination of Stefanopoulos combined with Schmandt as urged by the PTO and the Solicitor, such combination cannot provide the results obtainable and claimed in accordance with the "speech user agent", which operates as an "intelligent" device (rather than as a robot) in the combination of the subject invention.

**1. APPELLEE'S STATEMENT OF THE ISSUES IS ERRONEOUS  
AND NOT REFLECTIVE OF THE RECORD ON APPEAL**

Appellee set forth in its Statement of the Issues that only Claims 1 and 14 are on appeal (Appellee's Brief, page 1). While Appellee is entitled to not

defend portions of the Board's decisions (in which case Claims 2-13 and 15-19 should be deemed allowable) any other action or argument by Appellee does not change the fact that Claims 1-19 are on appeal, as set forth below.

The Examiner issued a Final Rejection on the pending application on March 27, 1997 (A66-A71). Claims 1-19 were rejected under 35 U.S.C. § 103 as being unpatentable over Stefanopoulos et al., (5,333,237) and in view of Schmandt et al., ("Augmenting a Window System with Speech Input", Computer Magazine, 8/90, Vol. 23, Issue 8, pages 50-56).

Appellants filed their Appeal Brief to the Board on August 21, 1997 (A79-A92) in which they specifically challenged the rejection of Claims 1-19. The Board issued its Decision on Appeal on February 28, 2001 (A9-A20), affirming the Examiner's rejection of Claims 1-19. The Board's rationale in its Decision on Appeal for affirming the Examiner's rejection was that the Examiner's analysis had "at least satisfied the burden of presenting a prima facie case of obviousness" (A13) and that Appellants had not overcome that burden (A16). The Board further states, regarding Claims 5-19, that "the Examiner has addressed the language of these claims and

provides a line of reasoning for asserting the obviousness or inherent nature of each of the claimed features" (A17).

Appellants filed a Request Pursuant to 37 C.F.R. 1.197(b) for Reconsideration of the Board of Appeals Decision on March 15, 2001 (A109-A123). In their Request, Appellants argue that the Board had overlooked or misapprehended the basic requirements of what constitutes presenting a *prima facie* case of obviousness in their determination that the Examiner had met such burden. Further, regarding Claims 5-19, Appellants argued that the Examiner had not "provided a line of reasoning for asserting the obviousness or inherent nature of **each of the claimed features**", as determined by the Board.

The Board granted the Petition for Rehearing on April 24, 2001 (A1), considered all of the issues raised by Appellants in their Petition for Rehearing, but declined to make any changes to their previous affirmance of the 35 U.S.C. § 103 rejection of Claims 1-19 (A7, see also A1-A8).

Accordingly, as set forth on page 1 of the Brief for Appellants, the sole legal issue before the Court is whether the U.S. Patent and Trademark

Office (hereinafter PTO or "Patent Office") Board of Patent Appeals and Interferences (hereinafter "the Board") erred in holding the invention, as defined in Claims 1-19, would have been obvious to one of ordinary skill in the art within the meaning of 35 USC 103 over a combination of the Schmandt and Stefanopoulos references. The subissues are:

- A. Did the PTO fail to provide evidence of key limitations of independent Claims 11 and 14 within the prior art thereby proving that the factual findings underlying the Board's decision regarding Claims 11 and 14 (and Claims 12, 13 and 15-19 through claim dependency) are not supported by substantial evidence?
- B. Is there substantial evidence in the record to support the Board's determination that the Examiner has met his burden of making out a *prima facie* case of obviousness of Claims 1-10 and 11-19 (in the event the arguments presented in argument A above are deemed by this Court insufficient to justify reversal of the Board's Decision regarding Claims 11-19) over a combination of the Schmandt and Stefanopoulos references?

**2. APPELLEE'S LISTING OF REPRESENTATIVE CLAIMS IS INCOMPLETE AND NOT REPRESENTATIVE OF THE RECORD ON APPEAL**

Appellee lists Claims 1 and 14 as being representative of Appellants' claims on appeal (inside of front cover of Appellee's Brief). Appellee's list is not representative of the record on appeal. Claim 11 should also be listed. The Board in its Decision on Appeal, specifically states: "We note initially that independent claims 11 and 14 are similar to independent claim 1 discussed supra, but add limitations directed to the construction and extraction of grammar related features as part of the speech user agent" (A17, lines 4-7). Appellants argued the allowability of independent Claim 11 in both its Brief on Appeal (A83, A84) and Request for Reconsideration (A114-A118). Accordingly, independent Claim 11 is on appeal.

**3. APPELLEE'S STATEMENT OF THE CASE IS MISLEADING AND INCOMPLETE**

The Statement of the Case as presented by Appellee conveniently omits facts beneficial to Appellants and distorts facts to the advantage of Appellee's case.

For example, in its description of Appellants' Invention, Appellee states that "TI's written description also states that the electronic power of personal computer ("PCs") has increased to the point that PCs can readily support speech input" (Appellee's Brief, page 2, lines 9-11). In reality, what Appellee describes as "speech input" is set forth in Appellants' specification as "speaker independent, continuous speech recognition" (A27, line 3).

Appellee fails to discuss independent Claim 11 and the claims dependent therefrom. It is clear from the record on appeal that independent Claim 11 and the claims that depend therefrom are "on appeal".

Appellee erroneously states that Stefanopolous discloses "databases" 17 and 18 (Appellee's Brief, page 4, lines 11-12). In reality, Stefanopoulos discloses that reference numeral 16 is a "document archive" and reference numerals 17 are "active documents" and reference numerals 18 are "passive documents" within archive 16 (A148, col. 4, lines 55-65). Accordingly, active documents 17 and 18 are NOT "databases", as suggested by Appellee. Further, to the extent Stefanopoulos discloses databases, they are data bases within the expert system shell 11 itself (A148, col. 4, lines 62-65), NOT external databases as suggested by Appellee.

Nowhere does Schmandt teach or suggest that Xspeak (or Xspeak II for that matter) is a speech "server", as suggested by Appellee (Appellee's Brief, page 5, lines 11-12). While Xspeak may be a speech program, it is NOT a speech "server", as suggested by Appellee.

Appellee's statement that "Schmandt discloses his 'Xspeak' system which uses voice instead of a computer mouse to browse and select, and thereby saves a user time by avoiding or reducing the use of a mouse" (Appellee's Brief, page 5, lines 15-12) is misleading and inaccurate. In reality, the only browsing and selecting performed by Schmandt's "Xspeak" is to use voice to manage a number of windows without removing his or her hands from the keyboard" (A152, col. 1, lines 8-18) - no other "browsing" or "selecting" is disclosed. Further, contrary to Appellee's contention that Schmandt's "Xspeak" system saves a user time by avoiding or reducing the use of a mouse, Schmandt specifically states that, "Speech proved to be neither faster nor slower than the mouse" (A152, col. 2, lines 14-15).

#### **4. APPELLEE'S RECITATION OF THE EXAMINER'S REJECTION IS MISLEADING**

Appellee's recitation of the Examiner's Rejection presents Appellee's understanding of the Examiner's Rejection rather than the Examiner's statements themselves. Particularly, Appellee states: "The Examiner additionally found that the art of speech recognition has used **particular grammars to optimize the application employing them**" (Appellee's Brief, page 7, lines 6-8). In reality, the Examiner stated: "The use of grammar is old and well known in the art of speech recognition as a means of optimization which is highly desirable" (A54, lines 19-20). Appellee further states: "Thus, the examiner found that a skilled artisan would have been **motivated to employ such grammars** in order to reduce manual, keyboard intervention and make the system more friendly, thereby render claim 14 obvious" (Appellee's Brief, page 7, lines 8-11). In reality, the Examiner made no such determination. The Examiner's actual language is as follows:

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to use the method of using a speech recognizer and processing the data to navigate in a windows environment as taught by Schmandt et al., and incorporating it into the hypermedia structured knowledge base system as taught by Stefanopoulos et al., to obtain a speech interface to the Web that allows easy access to information on

the Web by reducing manual, intervention [i.e., the use of keyboard], and which is user friendly (A55, lines 1-7).

## **5. APPELLEE'S RECITATION OF THE DETERMINATIONS OF THE EXAMINER AND BOARD IS MISLEADING**

Appellee erroneously states that the Board determined that Stefanopolous discloses "databases" 16 and 17 from which the browser selects (Appellee's Brief, page 12, line 16). In reality, Stefanopoulos discloses that reference numeral 16 is a "document archive" and reference numerals 17 are "active documents" and reference numerals 18 are "passive documents" within archive 16 (A148, col. 4, lines 55-65). Accordingly, active documents 17 and 18 are NOT "databases", as suggested by Appellee and no such determination was made by the Board. Further, to the extent Stefanopoulos discloses databases, they are data bases within the expert system shell 11 itself (A148, col. 4, lines 62-65), NOT external databases as suggested by Appellee.

## **6. THE EXAMINER AND THE BOARD DID NOT FIND THAT SCHMANDT DISCLOSES A SPEECH USER AGENT**

Appellee states that "the Board and examiner found that Schmandt discloses a speech **user agent**, in view of the phrases' ordinary meaning" (Appellee's Brief, page 13, lines 7-8). Such statement is a misrepresentation of the Boards' Decision. In reality, the Board relied upon the Examiner analysis for its determination that "a skilled artisan would have been motivated and found it obvious to incorporate the speech input and speech recognition techniques taught by Schmandt into the expert system of Stefanopoulos in order to reduce the need for less user friendly manual keyboard and mouse click inputs"(A12, line 16 - A13, line 16). However, quick reference to page 4-5 of the Examiner's Answer (A97-98, Answer, pages 4-5) shows that the Examiner only determined that Schmandt discloses "use of speech to navigate in a windows environment across workstations" (A97, lines 15-18). Accordingly, the Examiner does not make the specific determination that Schmandt discloses a "speech user agent", as suggested by Appellee.

**7. THE EXAMINER AND THE BOARD DID NOT STATE THAT THEY WERE USING THE ORDINARY MEANING OF SPEECH USER AGENT**

Appellee states that "the Board and examiner found that Schmandt discloses a speech **user agent**, in view of the phrases' **ordinary meaning**" (Appellee's Brief, page 13, lines 7-8). Such statement is a misrepresentation of the Boards' Decision. Nowhere in the record do the Examiner and/or Board state they are using the "ordinary meaning" of "speech user agent", as suggested by Appellee (Appellee's Brief, page 13, lines 7-8). Such statement by Appellee is supposition not supported by fact. Similarly, there is no teaching in Schmandt that supports Appellee's supposition.

**8. THERE IS NO EVIDENCE IN THE RECORD THAT THE BOARD/EXAMINER USED APPELLEE SUPPLIED DEFINITION OF SPEECH USER AGENT**

Appellee provides this Court a definition for Speech user agent: "'Speech user agent' refers to a system where a user can employ speech or voice with the assistance of a representative, transformer or facilitator" (Appellee's Brief, page 17, lines 12-14). Appellee goes on to argue that "the specification is wholly consistent with such an interpretation" (Appellee's

Brief, page 17, lines 15-16). Appellee further argues that "Nowhere in TI's specification has it expressly defined this phrase as something different than its ordinary meaning" (Appellee's Brief, page 17, lines 18-19). Appellee is incorrect on all counts, as set forth below.

While Appellants' specification does not contain a specific definition for "speech user agent", the specification contains multiple references to the function of the speech user agent, which is more than sufficient to allow one of ordinary skill to arrive at a definition for "speech user agent" and to determine that Appellee's provided definition of a "speech user agent" is much broader than any definition of "speech user agent" derivable from Appellants' specification, as set forth below:

The present invention describes a speech interface to the Web that allows easy access to information and **a growth path toward intelligent user agents** (A27, lines 3-5);

Additionally, the recognizer uses phonetic models to **allow recognition of any vocabulary word without training on that specific word** (A27, lines 7-8);

The ability to handle a **flexible vocabulary, coupled with the ability to dynamically modify grammars in the recognizer, allows the invention to support grammars particular to a Web page** (A27, lines 8-10);

These features are utilized to support a **Speakable Hotlist, speakable links, and smart pages in the speech user agent** (A27, lines 10-12);

The voice control information is encoded in a grammar language and is interpreted by a Web client user-agent that translates user utterances into client actions (A27, lines 14-16);

The invention includes a speaker independent, continuous, real-time, flexible vocabulary speech interface to the Web as an integral part of building an intelligent user agent (A27, lines 17-18); and

The Speakable Hotlist and speakable links capabilities go a long way toward making the Web browser speech aware, but they only make the existing capabilities of the browser easier to use. In addition to links, pages on the Web also contain forms and should also be addressed. To address this issue and a variety of others, the present invention includes Smart Pages (A30, lines 21-24).

Appellants' speech user agent is intelligent - Schmandt's speech interface is not "intelligent". Appellants' speech user agent uses phonetic models to allow recognition of any vocabulary word without training on that specific word - Schmandt's speech interface always associates its action with "voice templates", which are words trained and stored in the recognizer that constitute its vocabulary (A154, col. 2, lines 8-10, Fig. 2). Appellants' speech user agent has the ability to handle a flexible vocabulary, coupled with the ability to dynamically modify grammars in the recognizer, allows the invention to support grammars particular to a Web page - Schmandt's speech interface does not. Appellants' speech

user agent is a flexible vocabulary interface - Schmandt's vocabulary is predetermined and stored in its speech interface and hence not "flexible". Accordingly, the definition of a speech user agent previously provided by Appellants to this Court (Appellants Brief, page 35 lines 16-18): "The speech user agent is the key piece of software in the subject invention that dynamically creates the vocabulary, grammar and actions that are possible in a given situation", conforms to the above teaching from Appellants specification, and does NOT conform to Appellee's alleged "ordinary" meaning of the term speech user agent.

Moreover, even assuming, arguendo, that motivation can be found to combine Schmandt and Stefanopoulos, placing Schmandt's speech interface into the Stefanopoulos apparatus will only make it possible to use speech for some of the functions of Stefanopoulos' browser, which is significantly less than Appellants corresponding speech user agent.

Accordingly, Appellee's definition of a Speech User Agent is not consistent with the definition of Speech User Agent that is derived from Appellants specification. One of ordinary skill in the art would determine, after reviewing Appellants' specification, that Appellants definition of a

speech user agent is much narrower than the definition supplied by Appellee.

## **9. SCHMANDT'S "XSPEAK" DOES NOT FACILITATE VOICE SELECTION FROM WITHIN A DATABASE**

Appellee is misdescriptive when it states: "The reference, in several places, specifically discloses "Xspeak," which is an interface device where speech is the input and the corresponding output selects within a **database**, in view of the input" (Appellee's Brief, page 13, lines 9-12). Appellee is arguing that Schmandt's "Xspeak" can navigate or move between windows and rearrange them, AND ALSO use voice to actuate/control programs within the windows. Regarding "Xspeak", Schmandt discloses that actuation/control of programs within the windows is controlled by keystrokes from the keyboard - NOT by voice, as set forth below:

Xspeak associates windows with voice templates, words trained and stored in the recognizer and constituting its vocabulary. Speaking a window's template pops the window to the foreground and moves the mouse pointer to the middle of the window. The window manager, which does not distinguish this motion from mouse motion, shifts the input focus to the appropriate window. **At this point, keystrokes are directed to the application running within the window.** (A154, col. 2, lines 8-19).

The original Xspeak was limited in its range of operations. For instance, user could not use voice to control direct-manipulation objects such as scroll bars. Furthermore, there was **no way** to group functionality (such as having two windows pop the top of the window stack), **to conditionally invoke programs based on the user's current environment**, or to wait for a window to become exposed before proceeding. (A156, col. 3, lines 16-26).

Accordingly, while a "window" may be actuated by speaking a window's name, "keystrokes" from a keyboard are required to actuate any applications within the window. Thus, Xspeak CANNOT be used to select "within a database, in view of the input", as suggested by Appellee. This also means that whatever speech interface Schmandt discloses (even if somehow equated to be a "speech user agent") does not/can not "facilitate activation of a network browsing module to access an information resource located on a computer network", as required by Claims 1 and 11, since Schmandt's Xspeak specifically discloses that keystrokes are required for such action.

Schmandt goes on to discuss a work in progress, what it calls "Xspeak II", stating the goal that "Xspeak II allows greater flexibility in the speech interface" and "Users can employ direct manipulation using voice, interacting with an application in addition to simply selecting it" (A156, col. 2, lines 14-18). Unfortunately, while Schmandt discusses something called

Xspeak II, and argues that it provides additional functionality over Xspeak, the disclosure of Xspeak II is non-enabling. More particularly, while Schmandt provides a wish list of the things that XspeakII will do, it discloses nothing more than disclose one "G-XL file" and one figure (fig. 3) of what is referred to as a specialized G-XL language (which purportedly was developed for this application and hence not known to one of ordinary skill in the art). Schmandt does not disclose sufficient technical information (e.g., at least all of the G-XL configuration files) that one of ordinary skill in the art would need to reproduce Xspeak II. Only parts of one G-XL configuration file are disclosed (A156, col. 3, lines 53-54). Accordingly, Schmandt's disclosure of Xspeak II does not overcome the previously discussed deficiencies of Xspeak.

Appellee is also overly simplistic in its analysis of what Xspeak does (Appellee's Brief, page 13, lines 12-14). Appellee suggests that "Xspeak is the agent or device for the speech of a user, producing the desired response based on the user's spoken command" (Appellee's Brief, page 13, lines 12-14). In reality, Xspeak only produces the desired response to the extent **Xspeak has associated windows with voice templates, words have been trained and stored in the recognizer and constitute its vocabulary**, and

the desired result is to move and or rearrange windows (A154, col. 2, lines 8-28). This also applies to Xspeak II.

**10. APPELLEE'S STATED MOTIVATION FOR COMBINING STEFANOPOULOS AND SCHMANDT IS NOT REFLECTIVE OF THE MOTIVATION PROVIDED BY THE BOARD AND THE EXAMINER**

Appellee discloses what it asserts are selected teachings from the Schmandt and Stefanopoulos references (Appellee's Brief, page 14, lines 4-13). Thereafter, Appellee states what it believes to be the motivation for combining Schmandt and Stefanopoulos. While perhaps an interesting academic exercise, Appellee's stated motivation is not reflective of the motivation as determined by the Board and the Examiner. This Court reviews the decision of the Board, NOT the Decision of the Solicitor, NOR the Decision of the Board that the Solicitor would rather have. The Examiner's stated grounds for combining Schmandt and Stefanopoulos (as adopted by the Board) is as follows:

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to use the method of using a speech recognizer and processing the data to navigate in a windows environment as taught by Schmandt et al., and incorporating it into the hypermedia structured knowledge base system as taught by Stefanopoulos et al., to obtain a speech

interface to the **Web** that allows easy access to information on the **Web** by reducing manual intervention [i.e., the use of keyboard], and which is user friendly (A51, lines 12-17 (per Claim 1)); (A53, lines 13-19 (per Claim 11)); (A55, lines 1-7 (per Claim 14))(emphasis added).

The Examiner's above obviousness analysis is flawed for at least four reasons. First, Schmandt's "use of speech or voice to navigate in a windows environment" is not designed for use on the "Web" - it was designed to navigate a windows environment on an X windows server. Second, such access would not be "easy" since all of the locations would have to have been pre-identified and entered into a computer by the user implementing Schmandt's computer and voice templates would have to have been previously enrolled for the specific location(s) - which is not "easy". Third, Schmandt's "use of speech or voice to navigate in a windows environment" does NOT reduce manual intervention [i.e., the use of keyboard], as suggested by the Examiner. Schmandt specifically discloses:

Speech **DOES NOT** provide a **keyboard substitute**, but it does assume some of the functions currently assigned to the **mouse**. Thus, a user can manage a number of windows **without removing his or her hands from the keyboard** (A152, column 1, lines 12-18)(emphasis added).

We surmised that allowing users to **remain focused on the screen and keyboard**, instead of fumbling for the mouse, would be beneficial in a workstation environment (A153, column 2, lines 4-8)(emphasis added).

Further, to set the record straight, Appellants respectfully point out that the Examiner NEVER equated a mouse (or mouse clicks) as being the same as a keyboard (or keyboard inputs) (see, A48-A59, and A93-A102) as suggested by the Board in its Decision on Appeal (A13, lines 4-6).

Fourth, there is no teaching or suggestion in Schmandt that would lead one of ordinary skill in the art at the time of the invention to make the determination that Schmandt's speech interface is "user friendly". Schmandt specifically discloses:

Speech proved to be **neither faster nor slower than the mouse**, although the choice of which medium to employ was in part related to what else the user was doing with his or her hands (A152, col. 2, lines 3-7);

From our analysis of these empirical and observational data, we reached the following conclusion about our users' experiences with Xspeak:

A) **Recognition is not straightforward** (A155, col. 1, last line - col. 2, line 4) including the problem that despite actions by Schmandt and his co-authors, **low recognition accuracy rates remained a problem** (A155, col. 2, lines 21-22) and "**poor recognition accuracy was the greatest impediment** to acceptance of Xspeak (A155, col. 2, lines 27-29);

B) For simple change-of-focus tasks (moving the mouse from one exposed window to another exposed window), **speech was not faster than the mouse**. In fact, **it was marginally slower** (A155, col. 3, lines 8-12);

C) Some users were **not helped much by the voice interface** (A155, col. 3, lines 26-27);

D) We (Schmandt et al.,) found the use of voice in navigation **an incomplete substitute for the mouse**. Our users **did not rely on the speech interface to the exclusion of the mouse**. They **still had to use the pointer to interact with the direct-manipulation interfaces** within applications (A156, col. 1, lines 6-12).

Accordingly, one of ordinary skill in the art would NOT (indeed could not) have assumed that a speech interface would be a **more user-friendly** input than a keyboard. As a result, there is NO suggestion or motivation, in the knowledge generally available to one of ordinary skill in the art, to combine Schmandt and Stefanopoulos or to modify the resulting combination. The Examiner's obviousness analysis is fatally flawed.

It is also quite proper for Appellants to downgrade the Schmandt reference on the basis that it teaches away from the invention since the above experiences of users of Xspeak clearly show that Xspeak is NOT a more user-friendly input than a keyboard, as suggested by the Board and Examiner, which goes directly to motivation for the combination.

Even if, arguendo, all of the claims limitations were present, "obviousness cannot be established by combining the teachings of the prior art

to produce the claimed invention, **absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined ONLY if there is some suggestion or incentive to do so."**

ACS Hosp. Systems, Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious "modification" of the prior art. **The mere fact that the prior art may be modified in the manner suggested by the Examiner and the Board does not make the modification obvious unless the prior art suggested the desirability of the modification.** In re Gordon, 733 F.2d at 902, 221 USPQ at 1127. Moreover, **it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious.** In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed.Cir.1991). See also Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed.Cir.1985). The only purported motivation to combine the references to arrive at the invention of Claims 1, 11 and 14 comes from the Examiner - NOT the prior art.

**11. CONTRARY TO APPELLEE'S ASSERTION, THE BOARD DID ADDRESS IN ITS DECISION ON APPEAL AND DECISION ON REQUEST FOR REHEARING ALL THE LIMITATIONS IN APPELLANTS' CLAIMS**

Appellee is factually incorrect in its statement that the Board "was correct in not sua sponte addressing all the limitation in TI's patent application" (Appellee's Brief, page 20, lines 9-10). In fact, the Board DID address all of the limitations, as set forth below.

The Board granted Appellants' request to reconsider its Decision of February 28, 2001 (A7, lines 7-8). In its Decision on Reconsideration, the Board considered all of the issues submitted in the Request for Reconsideration (A2, line 12 - A7, line 6). Even though the Board stated (erroneously in our opinion) that Appellants raised issues in its Request for Reconsideration that were not raised in Appellants Brief on Appeal, it nonetheless proceeded to consider the issues:

However, on reconsideration of our Decision of February 28, 2001, in light of Appellants' comments in the Request for Rehearing, we find no error therein (A2, lines 7-9, emphasis added).

An argument not timely made is an argument waived. We nevertheless have reviewed our original decision and find no error in our finding of the obviousness to the skilled artisan of adding the speech interface techniques of Schmandt to the system of Stefanopoulos, nor in our

**reasoning which led to this conclusion (A4, lines 4-9, emphasis added).**

Our review of Schmandt did not overlook portions therein, as suggested by Appellants in the Request, which indicated that not all users found the speech interface to be useful or efficient (A4, lines 9-12).

We did not, and do not find, that the lack of positive experiences by some users of the speech interface of Schmandt would teach away from the Examiner's proposed combination, as implied by Appellants' arguments in the Request, when the entirety of Schmandt's disclosure is considered (A4, lines 12-17).

It is improper to downgrade a reference on the basis that it teaches away, unless it teaches away in the context of the combination of references (A4, lines 17-19).

As to Appellants' assertion of a lack of showing by the Examiner of a reasonable expectation of success for the combination of Stefanopoulos and Schmandt, **we find, aside from its appearance for the first time in the Request, such assertion to be unpersuasive.** Despite some users less than positive experiences with the speech interface of Schmandt, the entirety of the disclosure of Schmandt would, in our view, lead to reasonable expectation of success when combining Schmandt's speech interface techniques with other system applications such as described in Stefanopoulos. While evidence showing there was no reasonable expectation of success may support a conclusion of nonobviousness, no such evidence aside from attorney arguments has been forthcoming from Appellants (A4, lines 1-14).

As to Appellants' arguments (Request, pages 6-11) directed to the "grammar" related features appearing primarily in appealed claims 5-19, we find no error in our finding that, when considering the entirety of the record in this application, the Examiner's line of reasoning was sufficient to shift the burden to Appellants to come forward with evidence to rebut the

Examiner's position as to the inherency or obviousness of the claimed features. We also find no error in our ultimate conclusion that Appellants' reliance solely on attorney arguments which merely repeated the language of the claims with a general assertion that the applied references do not suggest the claimed features was insufficient to overcome the Examiner's position. Arguments of counsel cannot take the place of evidence in the record (A6, line 13 - A7, line 4).

Accordingly, the Board DID consider all of Appellants' arguments as set forth in Appellants' Brief on Appeal and Request for Rehearing.

Accordingly, Appellants strenuously dispute the Solicitor's allegation that the Board did not address all the limitations in their patent application.

**12. APPELLEE'S ARGUMENT THAT THE BOARD WAS NOT "REQUIRED" TO ADDRESS THE CLAIM 11 LIMITATION NOT ARGUED BY TI IN APPEALING TO THE BOARD IS IRRELEVANT AND NOT AN ISSUE BEFORE THIS COURT**

Appellee sets forth the argument that "the Board was not required to address the claim 11 limitations not argued by TI in appealing to the Board" (Appellee's Brief, page 20, line 11 - page 22, line 7). As set forth in the above argument, the Board DID in fact address all of the limitations regarding Claim 11 as set forth by Appellants in their Brief on Appeal and Request for Reconsideration. Accordingly, whether or not the Board was

"required" to address any aspect of Claim 11 is a non-issue before this Court.

### **13. CLAIM 11 WAS PROPERLY APPEALED AND ARGUED BEFORE THE BOARD**

Contrary to Appellee's assertion that "TI made new arguments concerning claim 11 which were simply made too late in the administrative process" (Appellee's Brief, page 22, line 8 - page 24, line 2) and assertion that "Before this Court, TI has waived any arguments as to claims 11 other than those it made in its Board Appeal Brief" (Appellee's Brief, page 24, line 3 - page 26, line 5) Claim 11 was properly appealed and argued before the Board as set forth in both Appellants' Brief on Appeal and Request for Reconsideration, as set forth below.

Appellants cited all of the elements of Claim 11 in their Brief on Appeal (A83). Appellants further set forth what Stefanopolous et al discloses (A83, lines 18-23) and specifically listed all of the elements of Claim 11 that were not taught or suggest by the Stefanopoulos reference

(A83, line 28 - A84, line 7), which includes the last four elements of Claim 11 (and the last element of Claim 14).

Regarding the last four elements of Claim 11 (and the last element of Claim 14), the Examiner's only statement anywhere in the record is as follows: "the use of grammar is old and well known in the art of speech recognition as a means of optimization which is highly desirable" (A53, lines 11-12). The Examiner cited no art and provided no other evidence supporting his above statement, which must be viewed as nothing more than a general allegation having no evidentiary support. Even had the Examiner provided evidence supporting his above statement that "use of grammar is old and well know", he makes no such similar argument regarding "extracting a grammar" or "modifying a grammar" or "processing a grammar" or "producing a grammar". Being that the Examiner failed to set forth any specific arguments or provide any evidence that the last four elements of Claim 11 (and last element of Claim 14) were obvious or well known in the art, there was no duty on Appellants to make other than a general response that such elements were not taught or suggested by the cited references. As a result, the burden of proof of proving a *prima facie* case of obviousness never shifted from the Examiner to Appellants.

The Board expressly agreed that all elements of Claim 11 were before it when it stated in its Decision on Appeal:

We note initially that independent claims 11 and 14 are similar to independent 1 discussed supra, but add limitations **directed to the construction and extraction of grammar related features as part of the speech user agent**. Dependent claims 5-10, 12, 13, and 15-19 **primarily delineate further speech recognition grammar construction and extraction features** (A17, lines 7-10, emphasis added).

The Examiner at pages 6-8 of the Answer, and at pages 3-7 of the Office action mailed August 7, 1996, paper no. 4, referenced in the Examiner's statement of the grounds of rejection, addresses the language of these claims and **provides a line of reasoning for asserting the obviousness or inherent nature of each of the claimed features**. In our view, the Examiner's reasoning is sufficient to shift the burden to Appellants to come forward with evidence and/or arguments to rebut the Examiner's position (A17, lines 11-19, emphasis added).

Reference to the record will show that the Examiner made not one iota of an argument relative to these portions of Claim 11. It follows that the statement of the Board that, "the Examiner's statement of the grounds of rejection, addresses the language of these claims and **provides a line of reasoning for asserting the obviousness or inherent nature of each of the claimed features**. In our view, the Examiner's reasoning is sufficient to shift the burden to Appellants to come forward with evidence and/or

arguments to rebut the Examiner's position (A17, lines 11-19, emphasis added)", is not based on or supported by the record, and is contrary to the record. There was no argument by the Examiner and hence there was and is no *prima facie* case of the obviousness of this claim.

We do not dispute Appellants' contention that the applied references **do not explicitly disclose several of the various features of claims 5-19**, however, Appellants' minimal arguments do not address the **Examiner's position of obviousness of inherency with respect to the features recited in these claims** (A18, lines 3-8, emphasis added).

One of the primary goals of Appellants in filing their Request for Rehearing was to show the Board that it had overlooked or misapprehended the fact that the Examiner had NO POSITION of obviousness of inherency with respect to the last four elements of Claim 11 (and last element of Claim 14). Accordingly, the Examiner had NOT "provided a line of reasoning for asserting the obviousness or inherent nature of each of the claimed features", as determined by the Board. This information was submitted to the Board to show the Board that it had overlooked or misapprehended this issue. Such action is permitted under 37 C.F.R. 1.197(b).

The Board granted Appellants' request to reconsider its Decision of February 28, 2001 (A7, lines 7-8). In its Decision on Reconsideration, the

Board considered all of the issues submitted in the Request for Reconsideration (A2, line 12 - A7, line 6). Even though the Board stated that Appellants raised issues in its Request for Reconsideration that were not raised in Appellants Brief on Appeal, it nonetheless considered the issues, as clearly shown by the statements of the Board (see statements by the Board as cited in Section 11 above).

Accordingly, the Board DID consider all of Appellants' arguments regarding Claim 11 as set forth in Appellants' Brief on Appeal and Request for Rehearing.

**14. APPELLEE'S ASSERTION THAT THE BOARD IS TOO BUSY AND DOES NOT HAVE THE TECHNICAL EXPERTISE TO ADDRESS ALL OF THE ISSUES RAISED BY APPELLANTS IS MISPLACED**

Appellee asserts that "the Board does not address a patent application in its entirety as an examiner does when the application is initially filed with the USPTO. Considering the high volume of appeals to the board, and the breadth of the individual application involved, authorities ... make eminent sense." (Appellee's Brief, lines 11-16).

Appellant respectfully points out that 35 U.S.C. § 6(a) specifically sets forth that, "The administrative patent judges shall be persons of competent legal knowledge and scientific ability who are appointed by the director". Accordingly, the Board members are REQUIRED and assumed by law to be able to handle the breadth of legal and scientific issues arising within the applications that they review.

Further, regarding the specifics of the present appeal, the rejection is a 35 U.S.C. 103 rejection. Appellants submit that in a 35 U.S.C. 103 rejection, determining whether or not an examiner has provided sufficient evidence to initially make out a prima facie case of obviousness is basic and fundamental to the duties of the Board. Accordingly, Appellee's assertion is misplaced.

**15. APPELLEE'S ASSERTION THAT THE BOARD SOMEHOW  
NEEDS ADDITIONAL PROTECTION FROM THIS COURT TO  
RESIST UNTIMELY ARGUMENTS FROM APPLICANTS IS  
MISPLACED**

Appellee states that "the time appropriate for TI to have argued and explained numerous claim 11 limitations was when it filed its Board Appeal Brief, and not for the first time in its request for reconsideration" (Appellee's Brief, page 23, lines 13-15). Appellee's argument, however, would deny Appellant the rights it has under 37 C.F.R. 1.197(b) to address points of law or fact misapprehended by the Board.

35 U.S.C. § 6 (b) states:

The Board of Patent Appeals and Interferences **SHALL**, on written appeal of an applicant, review adverse decision of examiners upon applications for patents and shall determine priority and patentability of invention in interferences declared under section 135(a). Each appeal and interference shall be heard by at least three members of the Board, who shall be designated by the Director. Only the Board of Patent Appeals and Interferences **MAY** grant rehearings. (emphasis added).

Thus, while the Board **SHALL** review the written appeal of an applicant, whether or not it grants a rehearing is discretionary on the part of the Board. If the Board determines that a Request for Rehearing does NOT address points of law or facts which were overlooked or misapprehended by

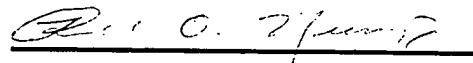
the Board, 35 U.S.C. § 6 (b) provides that the Board may refuse to grant a Rehearing. Obviously, the Board in the present case agreed with Appellants since they GRANTED the Request for Rehearing. The fact that the Board ultimately denied making any changes to their decision to affirm the rejection of Claims 1-19 under 35 U.S.C. 103 as being upatentable over Stefanopoulos in view of Schmandt, in light of the arguments set forth by Appellants in their Request for Rehearing, does not change the fact that the Request for Rehearing was GRANTED and all of the issues in the Request for Rehearing WERE considered by the Board.

Accordingly, the Board already has the power under 35 U.S.C. § 6 (b) to discourage applicants from arguing one set of arguments in its Appeal Brief and then after the Board has provided substantial evidence, switch to a different set of arguments on reconsideration to the Board post-decision. However, as demonstrated above, no such switch is present in this case in any event.

## CONCLUSION

For the foregoing reasons, this Court should reverse the Decision of the Board holding Claims 1-19 obvious under 35 U.S.C. § 103 over a combination of Schmandt and Stefanopoulos.

Respectfully submitted,



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UNITED STATES COURT OF APPEALS  
FOR THE FEDERAL CIRCUIT  
Appeal No. 01-1445

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IN RE            PHILIP R. THRIFT and  
                  CHARLES T. HEMPHILL

-----x

STATE OF TEXAS        )  
                          )        ss.:  
COUNTY OF DALLAS      )

I, Ronald O. Neerings, being duly sworn according to law, and over the age of 18, upon  
my oath depose and say that:

I am retained by        TEXAS INSTRUMENTS INCORPORATED

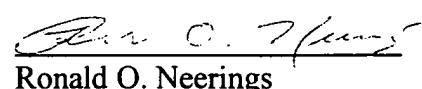
as attorney for the    APPELLANTS

That on the    SIXTH    day of    NOVEMBER,    2001,    I served the within  
REPLY BRIEF FOR APPELLANTS

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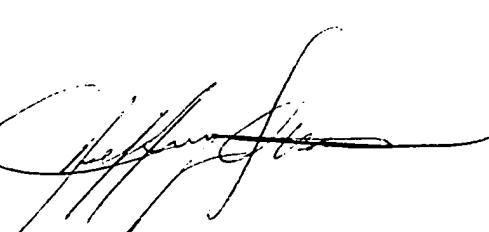
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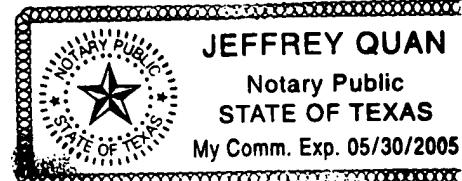
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Ronald O. Neerings

Sworn to and subscribed  
Before me this 6<sup>th</sup> day  
of NOVEMBER, 2001

MY COMMISSION EXPIRES

  
5/30/2005



CERTIFICATE OF COMPLIANCE UNDER FED. R. APP.P. 32(A)(7)

I certify under Fed. R. App. P. 32(a)(7) that this brief is proportionately spaced, has a typeface of 14 points, and contains 6,990 words according to the word count of the word-processing system used to prepare this brief.

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